

## **SHORT COURSE – Sheet Piling & Wave Equation**

Thursday, May 7, 2020

ROOM: Palm 2AB

7:00 AM – 8:00 AM	Registration / Breakfast
8:00 AM – 8:15 AM	Course Introduction
8:15 AM – 9:00 AM	<b>Steel Sheet Piles: Best Construction Practices</b> Gerry McShane, Director Piling, Service Steel Objective: <ol style="list-style-type: none"><li>1. Develop understanding of the changes in steel sheet pile design and how they align with continuous equipment innovation to improve economics and constructability on site.</li><li>2. Site examples will look at problems that have occurred and how they could easily have been prevented through better understanding of constructability.</li></ol>
9:00 AM – 9:45 AM	<b>Supervision and Inspection of Steel Sheet Piling Installation</b> David R. Chapman, P.E., President, Blakeslee, Arpaia, Chapman, Inc., Past President PDCA Objectives: <ol style="list-style-type: none"><li>1. Have familiarity with the basic components of sheet pile and soldier beam earth retention systems.</li><li>2. Describe what a field engineer for the contractor or the inspection firm should observe, how to plan the work and what safety precautions are needed for a successful project.</li></ol>
9:45 AM – 10:15 AM	Break
10:15 AM – 11:00 PM	<b>Ensuring the Durability of Sheet Piling Structures</b> Gerry McShane Objectives: <ol style="list-style-type: none"><li>1. Understand the factors that contribute to corrosion occurring and the rate that it develops. Various steps to control or inhibit corrosion will be outlined. A comparison will be made between the breakdown of steel and concrete over time. An example will be provided showing the various options open to the designer to inhibit or improve steel durability along with their associated costs.</li></ol>
11:00 PM – 12:00 PM	<b>Detailed Design Procedures for Earth Retaining Structures</b> David R. Chapman, P.E., President, Blakeslee, Arpaia, Chapman, Inc., Past President PDCA
12:00 PM – 1:00 PM	Lunch

1:00 PM – 1:15 PM

**Workshop Overview / Introduction**

Ryan Allin, P.E. Senior Engineer, Pile Dynamics, Inc.

Course Objectives:

1. Describe the hammer soil model used in GRLWEAP
2. Prepare the input and select options for GRLWEAP analysis
3. Interpret GRLWEAP results (bearing graph, inspector chart, drivability analysis)

1:15 PM – 2:45 PM

**Wave Equation Background**

Ryan Allin, P.E. Senior Engineer, Pile Dynamics, Inc.

2:45 PM – 3:00 PM

Break

3:00 PM – 3:45 PM

**Wave Equation Workshop: Bearing Graph, Inspection Chart**

Ryan Allin, P.E. Senior Engineer, Pile Dynamics, Inc.

3:45 PM – 5:00 PM

**Wave Equation Workshop: Drivability**

Ryan Allin, P.E. Senior Engineer, Pile Dynamics, Inc.

5:00 PM

Course Conclusion

*\*\*Requires separate registration*